CLAIMS:

1. An energy recovery matrix display driver circuit for generating a voltage (Vc) having a periodically changing polarity across a capacitive load (CL), said driver circuit comprising:

an inductor (L1) being coupled to the capacitive load (CL),

a first switch (S1) for creating, during a resonance period (Tr), a resonant circuit including the inductor (L1) and the capacitive load (CL) to change said voltage (Vc) from a first polarity to a second polarity, and a second switch (S2) for coupling, after the resonance period, the capacitive load (CL) to a power supply voltage (Vcc) having the second polarity,

a switch circuit (S3, D3, S6, D9) connected in parallel with the inductor (L1) for circulating a current (IL1) through the inductor (L1) in a loop formed by said switch circuit and said inductor (L1), said loop being closed not later than an instant at which said current (IL1) changes polarity at the end of the resonance period (Tr), and

a control circuit (CC) for controlling the first switch (S1), the second switch (S2), and the switch circuit to periodically open and close.

2. An energy recovery matrix display driver circuit as claimed in claim 1, characterized in that the switch circuit comprises a series arrangement of a diode (D3) and a controlled switch (S3), said series arrangement being connected in parallel with the inductor (L1), said controlled switch (S3) being closed not later than the instant at which said current (IL1) changes polarity at the end of the resonance period (Tr), said diode (D3) being poled to conduct said current (IL1) after it has changed polarity.

3. An energy recovery matrix display driver circuit as claimed in claim 2, characterized in that the switch circuit further comprises a series arrangement of a further diode (D9) and a further controlled switch (S6), said further series arrangement being connected in parallel with the inductor (L1), said further controlled switch (S6) being closed not later than an instant at which said current (IL1) changes polarity at the end of a further resonance period (Tr') in which the voltage across the capacitive load (CL) changes polarity

in an opposite direction with respect to the first-mentioned resonance period (Tr), said further diode (D9) being oppositely poled with respect to the first-mentioned diode (D3).

4. An energy recovery matrix display driver circuit as claimed in claim 1, characterized in that the control circuit (CC) is adapted to close the second switch (S2) after the instant at which said loop is closed.

5. A matrix display apparatus comprising a matrix display panel with a matrix of pixels associated with intersecting electrodes, an energy recovery matrix display driver circuit for generating a voltage (Vc) having a periodically changing polarity across a capacitive load (CL), said driver circuit comprising:

an inductor (L) being coupled to the capacitive load (CL),

a first switch (S1) for creating, during a resonance period (Tr), a resonant circuit including the inductor (L1) and the capacitive load (CL) to change said voltage (Vc) from a first polarity to a second polarity, and a second switch (S2) for coupling, after the resonance period (Tr), the capacitive load (CL) to a power supply voltage (Vcc) having the second polarity,

a switch circuit (S3, D3, S6, D9) connected in parallel with the inductor (L1) for circulating a current (IL1) through the inductor (L1) in a loop formed by said switch circuit and said inductor (L1), said loop being closed not later than an instant at which said current (IL1) changes polarity at the end of the resonance period (Tr), and

a control circuit (CC) for controlling the first switch (S1), the second switch (S2), and the switch circuit to periodically open and close.

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